

REMARKS/ARGUMENTS

As a preliminary matter, Applicants would like to thank the Examiner for considering the materials cited in the Supplemental Information Disclosure Statement filed in the present application on February 27, 2009, by the return of the signed copy of the Form PTO-1449 attached to the Official Action.

Additionally, Applicants would like to bring to the attention of the Examiner an additional Supplementary Information Disclosure Statement filed in the present application on September 3, 2009, after the electronic notification date of the present Official Action.

Applicants respectfully request that the Examiner consider the materials cited in this additional Supplementary Information Disclosure Statement, and that a signed copy of the corresponding Form PTO-1449 be returned to Applicants in the next Official communication.

In the Official Action, claims 1-4, 7-12, and 14-15 were rejected under 35 U.S.C. § 102(e) as being anticipated by PARK et al. (U.S. Patent Application Publication No. 2005/0280014 A1). Claims 5-6, 13, and 16-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over PARK in view of LOWERY (U.S. Patent No. 6,504,301 B1).

Upon entry of the present amendment, claims 1-6 have been amended. Claims 1-18 are currently pending for consideration by the Examiner.

Claims 1-4, 7-12, and 14-15 were rejected under 35 U.S.C. § 102(e) as being anticipated by PARK. With regard to independent claim 1, the Official Action asserts that PARK discloses all of the features recited in independent claim 1, citing PARK's Figures 2-9 and the corresponding descriptions. Contrary to this assertion, Applicants respectfully submit that PARK does not anticipate amended independent claim 1, since PARK fails to disclose each and every feature recited in amended independent claim 1.

More specifically, Applicants respectfully submit that PARK fails to disclose several features recited in amended independent claim 1. For instance, Applicants submit that PARK fails to disclose a light emitting device that includes *a sheet-like wavelength converter disposed so as to cover the recess and an edge area around the recess*, as explicitly recited in amended independent claim 1. As an exemplary, non-limiting illustration of this feature, Applicants direct the Examiner's attention to Applicants' Figure 1 that illustrates one embodiment of Applicants' sheet-like wavelength converter (5) that is disposed so as to cover the recess and an edge around the recess.

In distinct contrast to Applicants' configuration, Applicants submit that PARK's wavelength converter (126), as illustrated in PARK's Figure 3, does not have a sheet-like structure. Instead, PARK's wavelength converter (126) can be described as an irregularly-shaped mass. Additionally, Applicants submit that PARK's wavelength converter (126) does not cover the recess (See Applicants' Figure 1). In distinct contrast, PARK's wavelength converter (126) actually fills the recess. Thus, Applicants respectfully submit that PARK fails to disclose *a sheet-like wavelength converter disposed so as to cover the recess*, as explicitly recite in amended independent claim 1.

Secondly, Applicants submit that PARK fails to disclose that his sheet-like wavelength converter covers an edge area around the recess, in addition to covering the recess. Once again, the Examiner's attention is drawn to PARK's Figure 3 that illustrates a cross sectional view of PARK's LED package. As is illustrated in PARK's Figure 3, Applicants submit that neither PARK's resin material (126), nor PARK's resin material portion (126a), cover the edge area around the recess. Thus, Applicants respectfully submit that PARK fails to disclose *a sheet-like*

wavelength converter disposed so as to cover... an edge area around the recess, as explicitly recited in amended independent claim 1.

Applicants note that in the “Response to Arguments” section, the Official Action asserts that PARK’s Figure 8 “clearly illustrates that wavelength converter (126) covers...an edge area around the recess” (See Official Action, page8.). Applicants submit that this assertion is in error, as will be explained below.

First, Applicants submit that PARK’s Figure 3:(discussed above) illustrates the final completed and operational configuration of PARK’s LED package, which does not disclose that the wavelength converter (126) covering an edge area around the recess, as explicitly recited in amended independent claim 1.

Secondly, Applicants submit that PARK’s Figures 6-8 depict sectional views illustrating various interim steps in the production of PARK’s LED package. More specifically, PARK’s paragraph [0066] states:

[0066] Next, the lens unit 130 is move downward further from the position of FIG. 8 to the position of FIG. 3 so that the hooks 138 fasten with the projections 120 so that the lens unit 130 is stably assembled with the cup part 114. Upon the completion of the assembly process as above, the resin material 126 is cured according to predetermined conditions to produce an LED package 100 as shown in FIG.3

Applicants submit at least this section of PARK clearly describes that PARK’s Figure 8 is merely an illustration of a particular interim moment of PARK’s production process of assembling the structure of the completed LED package (100), the final structure of which is illustrated in PARK’s Figure 3. Thus, Applicants submit that it is erroneous to rely on PARK’s Figure 8 illustrating an interim step of PARK’s production process in order to illustrate a feature that does not exist in PARK’s completed LED package (100), as shown in PARK’s Figure 3.

Furthermore, Applicants submit that if the Official Action is relying on Figure 8 (instead of Figure 3) to disclose all of the features of independent claim 1, then PARK fails to disclose at least the claim feature that the *sheet-like wavelength converter... is excited by light emitted from the LED chip to emit light of a wavelength different from an excitation wavelength*, as explicitly recited in amended independent claim 1. PARK's failure in this regard is based upon the fact that the interim structure illustrated in PARK's Figure 8 is incomplete and non-functional.

Applicants submit that PARK further fails to disclose all of the features recited in amended independent claim 1 by failing to disclose *an emission controller provided ... to prevent emission of light coming from an area of the sheet-like wavelength converter that corresponds to the edge area around the recess*, as explicitly recited in amended independent claim 1. With regard to this feature of claim 1, the "Response to Arguments" section of the Official Action asserts that "the lens 132 portion of (PARK's) emission controller 130 serves to prevent light from reaching the area of the wavelength converter 126 that corresponds to the edge area around the recess". (See Official Action, page 8.)

Applicants respectfully submit that this assertion illustrates a misunderstanding of the above-cited feature of amended independent claim 1. Applicants submit that PARK's lens (132) does not serve to prevent light from reaching the edge area of PARK's wavelength converter (126). Additionally, Applicants submit that PARK's configuration is in distinct contrast to Applicants' configuration wherein Applicants' emission controller (hybrid lens) serves to prevent light coming from the edge area of the wavelength converter (5) from being emitted toward the irradiation surface (not to prevent light from reaching the edge area of the wavelength converter). Once again, please see Applicants' Figure 3 as an exemplary, non-limiting illustration of this configuration. Applicants further submit that the specific configuration of their

light emitting device results in particular benefits regarding the evenness of the color of the emitted light.

For at least the reasons discussed above, Applicants submit respectfully submit that PARK fails to anticipate amended independent claim 1, since PARK fails to disclose each and every feature recited in amended independent claim 1. Additionally, Applicants submit that claims 2-4, 7-12, and 14-15, which depend upon amended independent claim 1 are also patentable for at least the reasons discussed above regarding amended independent claim 1, and further for the additional features recited therein.

For instance, with regard to dependent claim 2, Applicants submit that, contrary to the generalized assertion of the Official Action, PARK's Figure 2 fails to disclose the features recited therein. Applicants further submit that PARK's Figure 3 illustrates that PARK's lens 132 (emission controller) does not have substantially a same shape as an opening of the recess of the mounting substrate, as recited in claim 2.

With regard to dependent claim 3, Applicants submit that, contrary to the generalized assertion of the Official Action, PARK fails to disclose the features recited in claim 3. For instance, Applicants submit that none of the asserted items 134, 136, or 138 of PARK (See PARK's Figure 3.) can reasonably be construed as a light blocking frame having an opening of substantially a same shape as the opening of the recess, as recited in claim 3.

With regard to claim 9, Applicants submit that PARK fails to disclose a hybrid lens in Figure 3. In contrast, Applicants submit that PARK discloses a single monolithic lens. Applicants submit that PARK's single monolithic lens is in distinct contrast to Applicants' hybrid lens, which is illustrated in an exemplary, non-limiting embodiment in Applicants' Figure 3. See Applicant's hybrid lens 4, including components 4a-4d.

For at least the reasons discussed above, Applicants respectfully submit that PARK fails to anticipate claims 1-4, 7-12, and 14-15, since PARK fails to disclose each and every feature recited therein. Accordingly, Applicants respectfully request that the rejection of claims 1-4, 7-12, and 14-15 under 35 U.S.C. § 102(e) as being anticipated by PARK be withdrawn.

Claims 5-6, 13, and 16-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over PARK in view of LOWERY. With regard to claims 5-6, 13, and 16, which depend upon amended independent claim 1, Applicants submit that LOWERY fails to remedy the distinct deficiencies of PARK discussed above. As a result, Applicants submit that claims 5-6, 13, and 16 are patentable for at least the reasons discussed above regarding amended independent claim 1, and further for the additional features recited therein.

For instance, with regard to dependent claim 6, the Official Action acknowledges that PARK fails to specify that the density of PARK's wavelength converter increases toward the center, and makes no reference to LOWERY whatsoever. However, the Official Action asserts that lacking any criticality, changing the form or shape of the prior art part does not make the claim patentable over the prior art, citing In re Dailey, 149 USPQ 47 (CCPA 1966). See Official Action pages 5-6.

Applicants submit that M.P.E.P. Section 2144.04 IV. B. characterizes In re Dailey as establishing that a feature in question can be considered as merely a matter of choice absent evidence that the particular claimed configuration is significant. Applicants respectfully submit that the features recited in dependent claim 6 are indeed significant, and are directed to Applicants' fifth embodiment as described in Applicants' Figure 5 and the corresponding description on specification on pages 22-23. Applicants submit that the features recited in claim 6 have the effect of reducing the difference, depending on the observation angles, in the ratio of

light converted to light of a different wavelength by the wavelength converting material. As a result of this particular configuration, Applicants submit that variations in color and intensity of light depending on the observation angles are reduced. Accordingly, in view of the established significance of the features recited in claim 6, Applicants submit that claim 6 would not have been obvious to one of ordinary skill in the art at the time of the invention in view of the applied references.

With regard to independent claims 17-18, Applicants submit that each of amended independent claims 17-18 recites features similar to some of the features discussed above regarding amended independent claim 1 and are patentable for similar reasons.

Additionally, Applicants submit that claim 17 is also patentable since the applied references fail to disclose or render obvious a wavelength converter having a cross section that is convex at the light output side, such that light paths having different observation angles are substantially equal in length, as explicitly recited in claim 17. Applicants submit that this feature recited in claim 17 is indeed significant and is directed to Applicants' fourth embodiment as described in Applicants' Figure 4 and the corresponding description on specification page 22. Applicants submit that this feature recited in claim 17 reduces variations in color and intensity of light depending on observation angles. Applicants also submit that LOWERY fails to disclose that the lights paths having different observation angles are substantially equal in length, as recited in claim 17. Accordingly, in view of the established significance of the features recited in claim 17, Applicants submit that claim 17 would not have been obvious to one of ordinary skill in the art at the time of the invention in view of the applied references.

Applicants submit that independent claim 18 is patentable for reasons similar to some of the reasons discussed above regarding amended independent claim 1, and for the additional reasons similar to that discussed above regarding claim 6.

For at least the reasons discussed above, Applicants respectfully submit that claims 5-6, 13, and 16-18 would not have been obvious to one of ordinary skill in the art at the time of the invention, in view of PARK and LOWERY. Accordingly, Applicants respectfully request that the rejection of claims 5-6, 13, and 16-18 under 35 U.S.C. § 103(a) as being unpatentable over PARK in view of LOWERY be withdrawn.

In view of the preceding amendments and discussion, Applicants submit that all of the claims 1-18 currently pending in the present application are patentable and in condition for allowance. Accordingly, Applicants respectfully request that an indication of the allowability of claims 1-18 be provided in the next Official communication.

SUMMARY

From the amendments, arguments, and remarks provided above, Applicants submit that all of the pending claims in the present application are patentable over the references cited by the Examiner, either alone or in combination. Accordingly, reconsideration of the outstanding Official Action is respectfully requested and an indication of the allowance of claims 1-18 is now believed to be appropriate.

Applicants note that this amendment is being made to advance prosecution of the application to allowance, and should not be considered as surrendering equivalents of the territory between the claims prior to the present amendment and the amended claims. Further, no acquiescence as to the propriety of the Examiner's rejections is made by the present amendment. All other amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should there by any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully Submitted,
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